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Thompson

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[54] APPARATUS AND PROCESS FOR APPLICATION AND ADJUSTABLE REPROFILING OF SYNTHETIC LENTICULES FOR VISION CORRECTION

[76] Inventor: Keith P. Thompson, 4584 E. Brookhaven Dr., Atlanta, Ga. 30319

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Primary Examiner—Richard J. Apley

Assistant Examiner—D. F. Crosby

Attorney, Agent, or Firm—Thomas & Kennedy

[57]

ABSTRACT

An apparatus and process for applying a synthetic lenticule to the cornea of a human eye is disclosed, the process also contemplating selective reprofiling of the lenticule while it is in place over the cornea. The process involves ablating a shallow peripheral groove in the cornea to receive the peripheral edge of the lenticule which is then secured therein with an adhesive, thus leaving the visual axis of the eye undisturbed. The lenticule is placed over the cornea with a unique micromanipulation apparatus and normally under vacuum conditions. A laser delivery system is used to reprofile the lenticule if necessary for refining the refractive power of the lenticule.

16 Claims, 4 Drawing Sheets

